1/1 - (C) WPI / DERWENT

AN - 90-026632 [04]

AP - JP880237499 880924

PR - JP880038481 880203; JP880237499 880924

TI - Prepn. of oil and fat contg. highly unsatd. fatty acid - comprises culturing specific microbial strain which can produce arachidonic acid with oil and fat as carbon source

it - PREPARATION OIL FAT CONTAIN HIGH UNSATURATED FATTY ACID COMPRISE CULTURE SPECIFIC MICROBE STRAIN CAN PRODUCE ARACHIDONIC ACID OIL FAT CARBON SOURCE

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PN - ---JP1304892--- A 891208 DW9004

IC - C12P1/80 ; C12P7/64 ; C12R1/64

AB - J01304892 Prepn. is effected by (a) culturing the microbial strain which can produce arachidonic acid and belongs to Mortierella, Conidiobolus, Pythium, Pytophthora, Entomophthora, Penicillium, Cladosporium, Mucor, Fusarium, Aspergillus or Rhodotorula, in the culture medium contg. oil and fat as the carbon source and (b) recovering formed highly unsatd. fatty acid-enriched oil and fat from the microbial body.

- The formation of highly unsatd. fatty acids is varied depending on the oil and fat used as carbon source. When using sesame oil, peanut oil, etc. arachidonic acid and bishomo-gamma-linolenic acid are enriched and when using the oil and fat contg. alpha-linolenic acid as carbon source, arachidonic acid and eicosapentaenic acid are enriched. Other than oil and fat, lignan derivs. such as sesamin, episesamin, sesaminol, etc. can be used as the additive for forming bishomo-gamma-linolenic acid.

- USE/ADVANTAGE - Recently physiological activity of highly unsaturated fatty acids such as eicosapentaenic acid, docosahexaenic acid, bishomo-gamma-linoenic acid, arachiodonic acid, etc. has been attracting attentions. The inventor has found that by culturing some microbes using oil and fat as carbon source, those highly unsaturated fatty acids are formed. (9pp Dwg.No.0/0)

DC - B05 D16 E17 D23